UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/628,135	07/28/2000	Kentaro Matsumoto	862.c1963	3541

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EXAMINER
MAHMOUDI, HASSAN

ART UNIT	PAPER NUMBER
2175	13

DATE MAILED: 10/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)	
Office Action Summary	09/628,135	MATSUMOTO ET AL.	
	Examiner	**Art Unit**	
	Tony Mahmoudi	2175	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>02 September 2003</u> .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-19</u> is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-19</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. **DOV POPOVICI**
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

U.S. Patent and Trademark Office

PTOL-326 (Rev. 04-01)   Office Action Summary   Part of Paper No. 13

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth

in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office

action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed

on 02-September-2003 has been entered.

Remarks

2. In response to communications filed on 01-August-2003, claims 1-4, 6-7, 13, and 19

are amended per applicant's request. Claims 1-19 are pending in the application.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1, 4, 7, 10, 13, 16, and 19 are rejected under 35 U.S.C. 103(a) as being

unpatentable over <u>Komori</u> (U.S. Patent No. 4,602,333) in view of <u>Denenberg et al</u>

(U.S. Patent No. 5,673,338.)

As to claim 1, <u>Komori</u> teaches an image storage (see Abstract) method

comprising:

an image storage step of continuously storing a plurality of image data (see

column 2, lines 15-20) in a first area of a single file (see column 4, lines 62-63, and

see column 6, lines 24-25); and

an information storage step of storing information for accessing a source (see

column 3, lines 58-68) outside the file, which pertains to each of the plurality of

image data stored in the image storage step (see column 6, lines 13-25), in a storage

order of the plurality of image data in a second area of the file (see column 6, lines

29-38.)

<u>Komori</u> does not teach storing reference information; wherein the reference

information includes location information for accessing image data which is a higher

resolution version of the corresponding image data stored in the first area.

<u>Denenberg et al</u> teaches an item verification system (see Abstract), in which he

teaches storing reference information (see column 6, lines 45-50, and see column 9,

lines 42-47); wherein the reference information includes location information (see

column 5, lines 37-55) for accessing image data which is a higher resolution version

of the corresponding image data stored in the first area (see column 5, lines 31-36,

and see column 6, lines 45-50.)

Therefore, it would have been obvious to a person having ordinary skill in the art

at the time the invention was made to have modified Komori to include storing

reference information; wherein the reference information includes information for

accessing image data which is a higher resolution version of the corresponding image

data stored in the first area.

It would have been obvious to a person having ordinary skill in the art at the time

the invention was made to have modified Komori by the teaching of Denenberg et al,

because storing the image reference information would enable the user to create

reference files for the stored images, where he would be able to access, retrieve, and

update the stored reference information without having to access the stored images;

and because the reference information including information for accessing image data

which is a higher resolution version of the corresponding image data stored in the first

area, would enable the system to offer a variety of choices to the user in enhancing

(increasing) the image resolution by modifying the image references (properties) and

storing the modified images with various resolutions for accessing and retrieval at a

later time or by other users. An example of this process is displaying "thumbnails" of

images with a certain image resolution, where a user accesses the image by clicking

on the thumbnail, enlarges the image, and modifies image properties (edits the

image), and saves the new image (edited image) with the changed properties, similar

to editing and saving edited images in Photoshop.

As to claims 4, 10, and 16, <u>Komori</u> as modified teaches wherein the image storage

step includes the step of compressing and storing the plurality of image data (see

<u>Komori</u>, column 2, lines 19-20.)

As to claim 7, <u>Komori</u> teaches an image storage apparatus (see Abstract)

comprising:

image storage means for continuously storing a plurality of image data in a first

area of a single file (see column 3, lines 3-10, and see column 4, lines 62-63); and

information storage means for storing information for accessing a source (see

column 3, lines 58-68) outside the file, which pertains to each of the plurality of

image data stored by the image storage means (see column 6, lines 13-25), in a

storage order of the plurality of image data in a second area of the file (see column 6,

lines 29-38.)

For the teachings of storing reference information; wherein the reference

information includes location information for accessing image data which is a higher

resolution version of the corresponding image data stored in the first area, the

applicant is kindly directed to the remarks and discussions made in claim 1 above.

As to claim 13, <u>Komori</u> teaches a storage medium for storing an image data file

(see column 3, lines 3-10, where "storage medium" is read on "storage device"), the

image data file comprising:

a first area which continuously stores a plurality of image data (see column 4,

lines 62-63); and

a second area (see column 4, lines 63-64) which stores information for accessing a

source (see column 3, lines 58-68) outside the file, which pertains to each of the

plurality of image data stored in the first area (see column 6, lines 13-25), in a storage

order of the plurality of image data (see column 6, lines 29-38.)

For the teachings of storing reference information; wherein the reference

information includes location information for accessing image data which is a higher

resolution version of the corresponding image data stored in the first area, the

applicant is kindly directed to the remarks and discussions made in claim 1 above.

As to claim 19, Komori teaches a storage medium (see column 2, lines 24-25)

storing a control program (see column 2, lines 28) for making a computer implement

generation and storage of an image data file, the control program comprising:

a code (see Abstract. It is inherent that an image processing system and apparatus

consists of code/program) of an image storage step of continuously storing a plurality

of image data in a first area of a single file (see column 4, lines 62-63, and column 6,

lines 24-25); and

a code (see Abstract. It is inherent that an image processing system and apparatus

consists of code/program) of an information storage step of storing information for

accessing a source (see column 3, lines 58-68) outside the file, which pertains to each

of the plurality of image data stored in the image storage step (see column 6, lines 13-

25, in a storage order of the plurality of image data in a second area of the file (see

column 6, lines 29-38.)

For the teachings of storing reference information; wherein the reference

information includes location information for accessing image data which is a higher

resolution version of the corresponding image data stored in the first area, the

applicant is kindly directed to the remarks and discussions made in claim 1 above.

5. Claims 5, 11, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Komori (U.S. Patent No. 4,602,333) in view of Denenberg et al (U.S. Patent No.

5,673,338) as applied to claims 1, 4, 7, 10, 13, 16 and 19 above, and further in view

of Yamaguchi et al (U.S. Patent No. 4,949,287.)

As to claims 5, 11, and 17, Komori as modified still does not teach wherein the

reference information specifies an image file name of an original of the image data

stored in the first area.

Yamaguchi et al teaches a document processing system for laying out of image

data (see Abstract), in which he teaches wherein the reference information specifies

an image file name of an original of the image data stored in the first area (see

column 2, lines 12-15, where the "file name" can be presented by the "relationship"

described within the reference data".)

Therefore, it would have been obvious to a person having ordinary skill in the art

at the time the invention was made to have modified Komori as modified to include

wherein the reference information specifies an image file name of an original of the

image data stored in the first area.

It would have been obvious to a person having ordinary skill in the art at the time

the invention was made to have modified Komori as modified, by the teaching of

Yamaguchi et al, because including wherein the reference information specifies an

image file name of an original of the image data stored in the first area, would enable

the system to differentiate the original image from the edited (modified) versions of

the same image, where the user can retrieve the images from their specific image file

names.

6.   Claims 2-3, 6, 8-9, 12, 14-15, and 18 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Komori (U.S. Patent No. 4,602,333) in view of Denenberg et al

(U.S. Patent No. 5,673,338) as applied to claims 1, 4, 7, 10, 13, 16 and 19 above, and

further in view of Kurakake et al (U.S. Patent No. 6,078,005.)

As to claim 2, Komori as modified does not teach the method further comprising

a feature amount storage step of assuring a third area in the file, and storing feature

amount data corresponding to the image data stored in the first area in the storage

order of the plurality of image data.

Kurakake et al teaches an apparatus for producing multi-media events (see

Abstract), in which he teaches the feature amount storage step of assuring a third area

in the file, and storing feature amount data corresponding to the image data stored in

the first area in the storage order of the plurality of image data (see figure 3(b) and

see column 7, lines 24-43, where "feature amount" is read on "feature property".)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Komori as modified, to include the feature amount storage step of assuring a third area in the file, and storing feature amount data corresponding to the image data stored in the first area in the storage order of the plurality of image data.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Komori as modified, by the teaching of Kurakake et al, because including the feature amount storage step of assuring a third area in the file, and storing feature amount data corresponding to the image data stored in the first area in the storage order of the plurality of image data would enable the user to store the feature amounts and property information associated with images along with (but separate from) the images according to the order in which images are stored, in order to increase the speed of image searching and be able to access the feature amounts associated with the image after searching for an locating the desired image.

As to claim 3, Komori as modified teaches the method further comprising a header information storage step of assuring a fourth area in the file, and storing header information including boundary, position information between the first and second areas (see Kurakake et al, column 7, line 59 through column 4, line 6.)

As to claim 6, <u>Komori</u> as modified teaches wherein the image storage step includes the step of storing one or a plurality of frame images extracted from moving image data in the first area (see <u>Kurakake et al</u>, column 5, lines 26-33), and

the reference information storage step includes the step of storing information that specifies moving image data corresponding to each frame image stored in the first area and a frame position thereof as the reference information in the second area (see <u>Kurakake et al</u>, column 5, line 57 through column 6, line 3.)

As to claim 8, <u>Komori</u> as modified does not teach the apparatus further comprising feature amount storage means for assuring a third area in the file, and storing feature amount data corresponding to the image data stored in the first area in the storage order of the plurality of image data.

<u>Kurakake et al</u> teaches an apparatus for producing multi-media events (see Abstract), in which he teaches feature amount storage means for assuring a third area .in the file, and storing feature amount data corresponding to the image data stored in the first area in the storage order of the plurality of image data (see figure 3(b) and see column 7, lines 24-43, where "feature amount" is read on "feature property".)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified <u>Komori</u> as modified, to include feature amount storage means for assuring a third area .in the file, and storing feature amount data corresponding to the image data stored in the first area in the storage order of the plurality of image data.

It would have been obvious to a person having ordinary skill in the art at the time

the invention was made to have modified Komori as modified, by the teaching of

Kurakake et al, because including feature amount storage means for assuring a third

area .in the file, and storing feature amount data corresponding to the image data

stored in the first area in the storage order of the plurality of image data would enable

the user to store the feature amounts and property information associated with images

along with (by separate from) the images according to the order in which images are

stored, in order to increase the speed of image searching and be able to access the

feature amounts associated with the image after searching for an locating the desired

image.

As to claim 9, Komori as modified teaches the apparatus further comprising

header information storage means for assuring a fourth area in the file, and storing

header information including boundary position information between the first and

second areas (see Kurakake et al, column 7, line 59 through column 4, line 6.)

As to claim 12, Komori as modified teaches wherein the image storage means

stores one or a plurality of frame images extracted from moving image data in the

first area (see Kurakake et al, column 5, lines 26-33), and

the reference information storage means stores information that specifies moving

image data corresponding to each frame image stored in the first area and a frame

position thereof as the reference information in the second area (see Kurakake et al,

column 5, line 57 through column 6, line 3.)

As to claim 14, <u>Komori</u> as modified does not teach wherein the image data file further comprises a third area which stores feature amount data corresponding to the image data stored in the first area in the storage order of the plurality of image data.

<u>Kurakake et al</u> teaches an apparatus for producing multi-media events (see Abstract), in which he teaches a third area which stores feature amount data corresponding to the image data stored in the first area in the storage order of the plurality of image data (see figure 3(b) and see column 7, lines 24-43, where "feature amount" is read on "feature property".)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified <u>Komori</u> as modified, to include wherein the image data file further comprises a third area which stores feature amount data corresponding to the image data stored in the first area in the storage order of the plurality of image data.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified <u>Komori</u> as modified, by the teaching of <u>Kurakake et al</u>, because including the image data file further comprising a third area which stores feature amount data corresponding to the image data stored in the first area in the storage order of the plurality of image data would enable the user to store the feature amounts and property information associated with images along with (but separate from) the images according to the order in which images are stored, in order to increase the speed of image searching and be able to access the feature amounts associated with the image after searching for an locating the desired image.

As to claim 15, <u>Komori</u> as modified teaches wherein the image data file further comprises a fourth area which stores header information including boundary position information between the first and second areas (see <u>Kurakake et al</u>, column 7, line 59 through column 4, line 6.)

As to claim 18, <u>Komori</u> as modified teaches wherein the first area stores one or a plurality of frame images extracted from moving image data (see <u>Kurakake et al</u>, column 5, lines 26-33), and

the second area stores information that specifies moving image data corresponding to each frame imaged stored in the first area and a frame position thereof as the reference information (see <u>Kurakake et al</u>, column 5, line 57 through column 6, line 3.)

Response to Arguments

7. Applicant's arguments filed on 01-August-2003 with respect to the cited references have been fully considered but are considered moot in view of the new grounds of rejection.
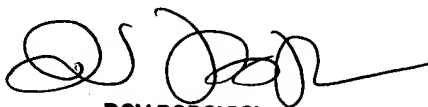
Conclusion

8. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Tony Mahmoudi whose telephone number is (703) 305-4887. The examiner can normally be reached on Mondays-Fridays from 08:00 am to 04:30 pm.

   If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached at (703) 305-3830.

tm

October 14, 2003

DOV POPOVICI
SUPERVISORY PATENT EXAMINER
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